

5. (Once Amended) A valve for a brake control actuator comprising:
a rod operable between respective operating conditions to selectively allow passage of brake fluid through the valve; and

a ball affixed at one end of the rod, the ball including a sealing section that upon engagement against a ball-receiving seat in the valve blocks passage to brake fluid therethrough, the ball further including a mounting section integral with the sealing section, the mounting section configured to provide a reduced footprint relative to a spheroidal footprint and enable a strong mechanical joint between the mounting section and the rod, wherein the mounting section comprises a cylindrical section circumferentially defining a midsection of the ball, and wherein the cylindrical section is bounded at opposite axial ends thereof by corresponding angled surfaces.

6. (Once Amended) A valve for a brake control actuator comprising:
a rod operable between respective operating conditions to selectively allow passage of brake fluid through the valve; and

a ball affixed at one end of the rod, the ball including a sealing section that upon engagement against a ball-receiving seat in the valve blocks passage to brake fluid therethrough, the ball further including a mounting section integral with the sealing section, the mounting section configured to provide a reduced footprint relative to a spheroidal footprint and enable a strong mechanical joint between the mounting section and the rod, wherein the mounting section comprises a V-shaped notch.

7. (Once Amended) A valve for a brake control actuator comprising:
a rod operable between respective operating conditions to selectively allow passage of brake fluid through the valve; and

a ball affixed at one end of the rod, the ball including a sealing section that upon engagement against a ball-receiving seat in the valve blocks passage to brake fluid therethrough, the ball further including a mounting section integral with the sealing section, the mounting section configured to provide a reduced footprint relative to a spheroidal footprint and enable a strong mechanical joint between the mounting section and the rod, wherein the mounting section comprises a hyperboloid section defining a midsection of the ball.

11. (Once Amended) A method for arranging a valve for a brake control actuator, the valve including a rod operable between respective operating conditions to selectively allow passage of brake fluid through the valve, the method comprising:

configuring a ball affixable at one end of the rod, the ball being configured to include a sealing section, and a mounting section integral with the sealing section;

configuring the sealing section so that upon engagement against a ball-receiving seat, the sealing section blocks passage to brake fluid therethrough;

configuring the mounting section to provide a reduced footprint relative to a spheroidal footprint while enabling a strong mechanical joint between the mounting section and the rod, and wherein the mounting section is further configured as a cylindrical section circumferentially defining a midsection of the ball;

configuring the end of the rod to correspond with the mounting section of the ball; and

affixing the ball to the end of the rod.

12. (Once Amended) A method for arranging a valve for a brake control actuator, the valve including a rod operable between respective operating conditions to selectively allow passage of brake fluid through the valve, the method comprising:

configuring a ball affixable at one end of the rod, the ball being configured to include a sealing section, and a mounting section integral with the sealing section;

configuring the sealing section so that upon engagement against a ball-receiving seat, the sealing section blocks passage to brake fluid therethrough;

configuring the mounting section to provide a reduced footprint relative to a spheroidal footprint while enabling a strong mechanical joint between the mounting section and the rod, and wherein the mounting section is further configured as a cylindrical section circumferentially defining a midsection of the ball and the cylindrical section is bounded at opposite axial ends thereof by corresponding angled surfaces;

configuring the end of the rod to correspond with the mounting section of the ball; and

affixing the ball to the end of the rod.

13. (Once Amended) A method for arranging a valve for a brake control actuator, the valve including a rod operable between respective operating conditions to selectively allow passage of brake fluid through the valve, the method comprising:

configuring a ball affixable at one end of the rod, the ball being configured to include a sealing section, and a mounting section integral with the sealing section;

configuring the sealing section so that upon engagement against a ball-receiving seat, the sealing section blocks passage to brake fluid therethrough;

configuring the mounting section to provide a reduced footprint relative to a spheroidal footprint while enabling a strong mechanical joint between the mounting section and the rod, and wherein the mounting section is configured as a V-shaped notch;

configuring the end of the rod to correspond with the mounting section of the ball; and

affixing the ball to the end of the rod.

14. (Once Amended) A method for arranging a valve for a brake control actuator, the valve including a rod operable between respective operating conditions to selectively allow passage of brake fluid through the valve, the method comprising:

configuring a ball affixable at one end of the rod, the ball being configured to include a sealing section, and a mounting section integral with the sealing section;

configuring the sealing section so that upon engagement against a ball-receiving seat, the sealing section blocks passage to brake fluid therethrough;

configuring the mounting section to provide a reduced footprint relative to a spheroidal footprint while enabling a strong mechanical joint between the mounting section and the rod, and wherein the mounting section comprises a hyperboloid section defining a midsection of the ball;

configuring the end of the rod to correspond with the mounting section of the ball; and

affixing the ball to the end of the rod.

Please cancel claims 1 through ~~3~~, and 8 through 10.